

FIG. 1A

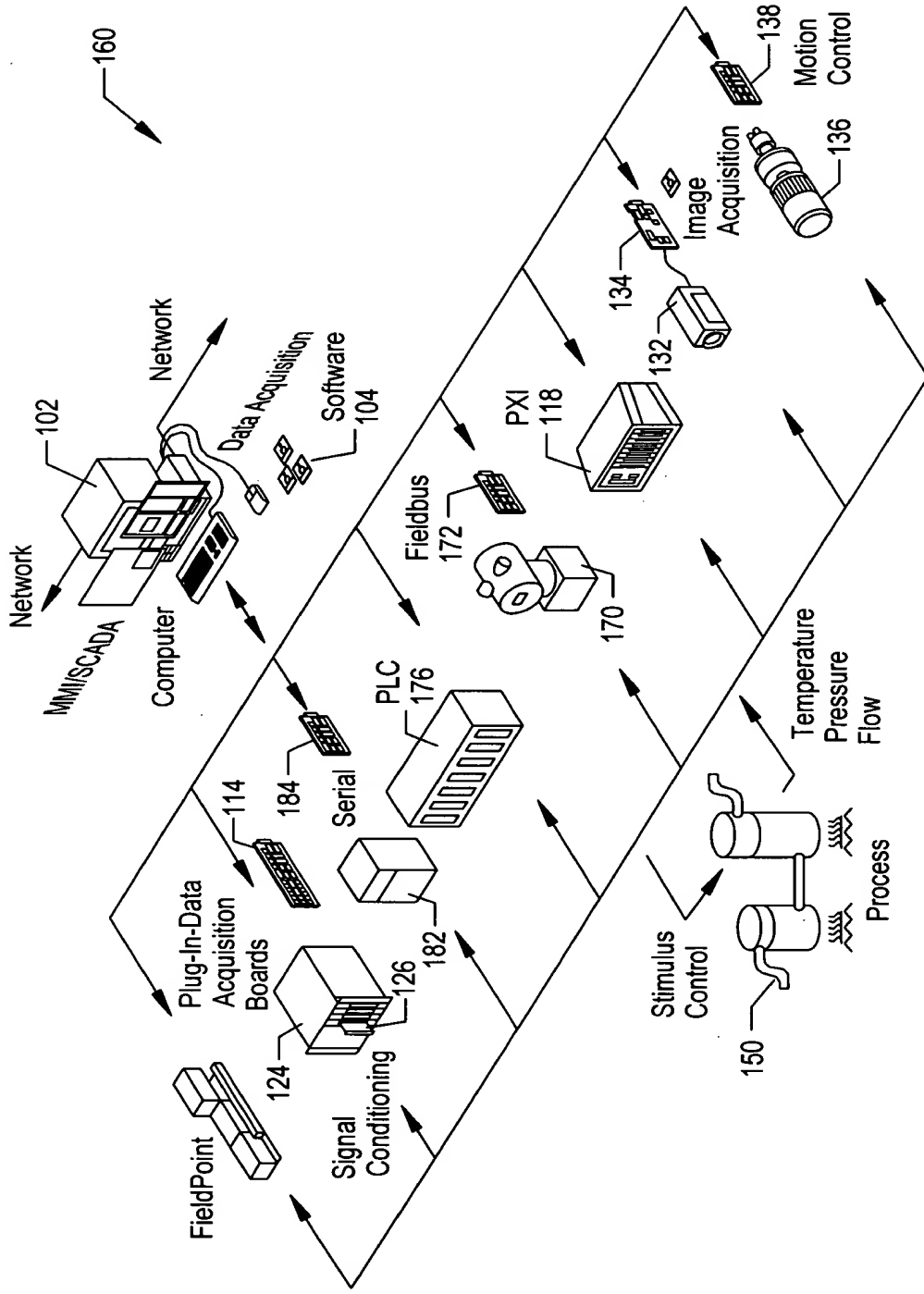


FIG. 1B

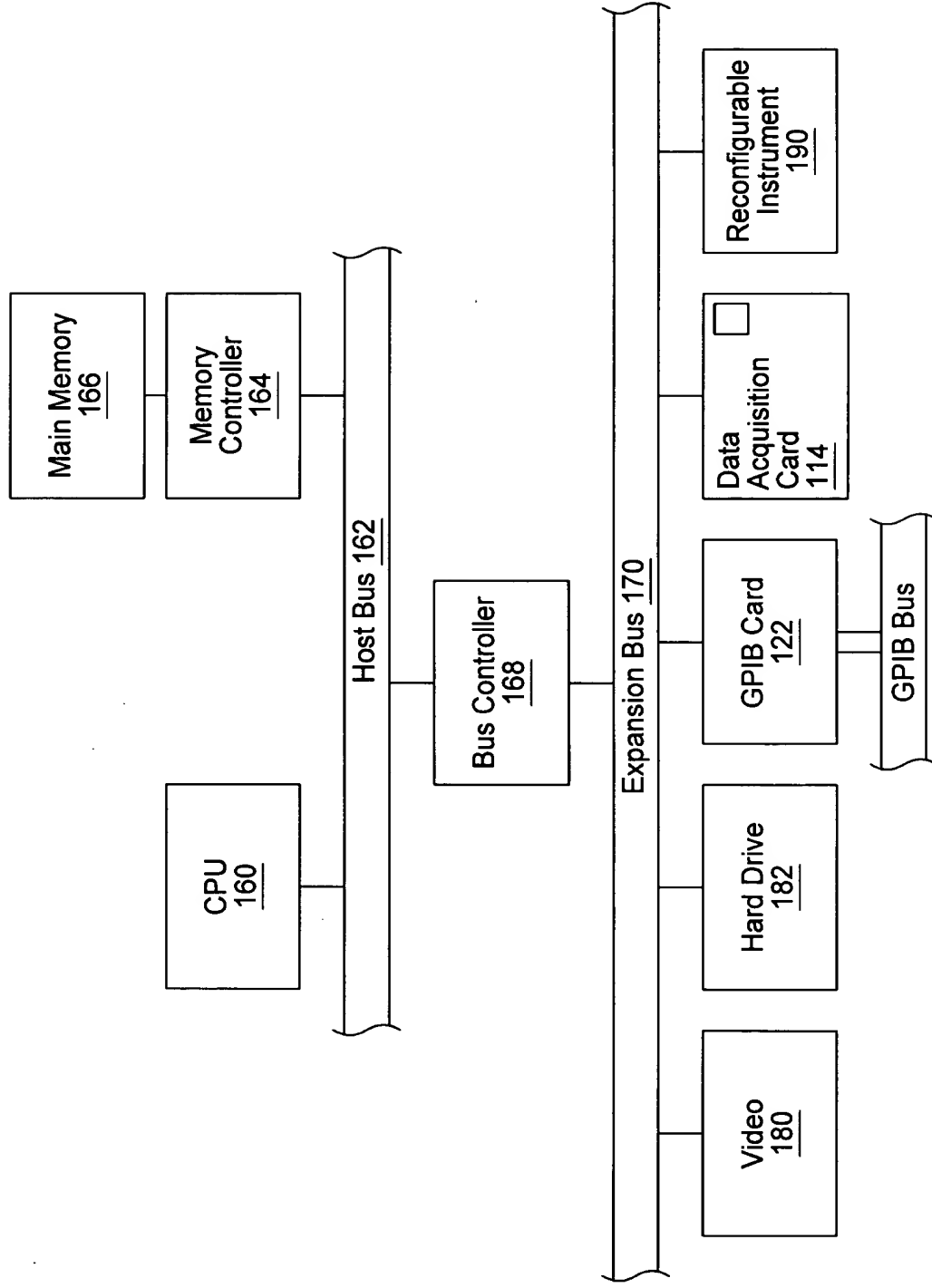


FIG. 2

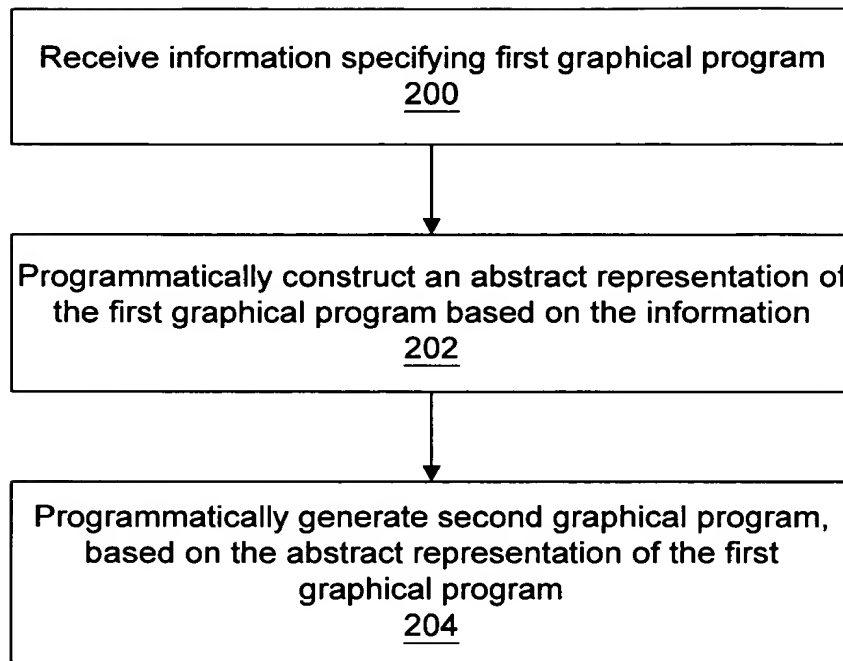


FIG. 3

Steps 202 and 204:

Analyze program information for first graphical program to
create a directed graph representation

220

Analyze directed graph representation to detect and
remove loops in the graph

222

Create a script specifying the creation of the second
graphical program, based on the directed graph
representation

224

Programmatically generate the second graphical program,
based on the script

226

FIG. 4

Step 220:

Create an array of block diagram nodes
240

Create an array of lines, wherein each line connects a
block diagram source node to a block diagram destination
node
242

Determine and record coordinate bounds and origins
related to user interface panel(s) and block diagram
panel(s)
244

Create adjacency list specifying data flow, control flow,
and/or execution flow for the block diagram nodes
246

FIG. 5

000221" 0T52460

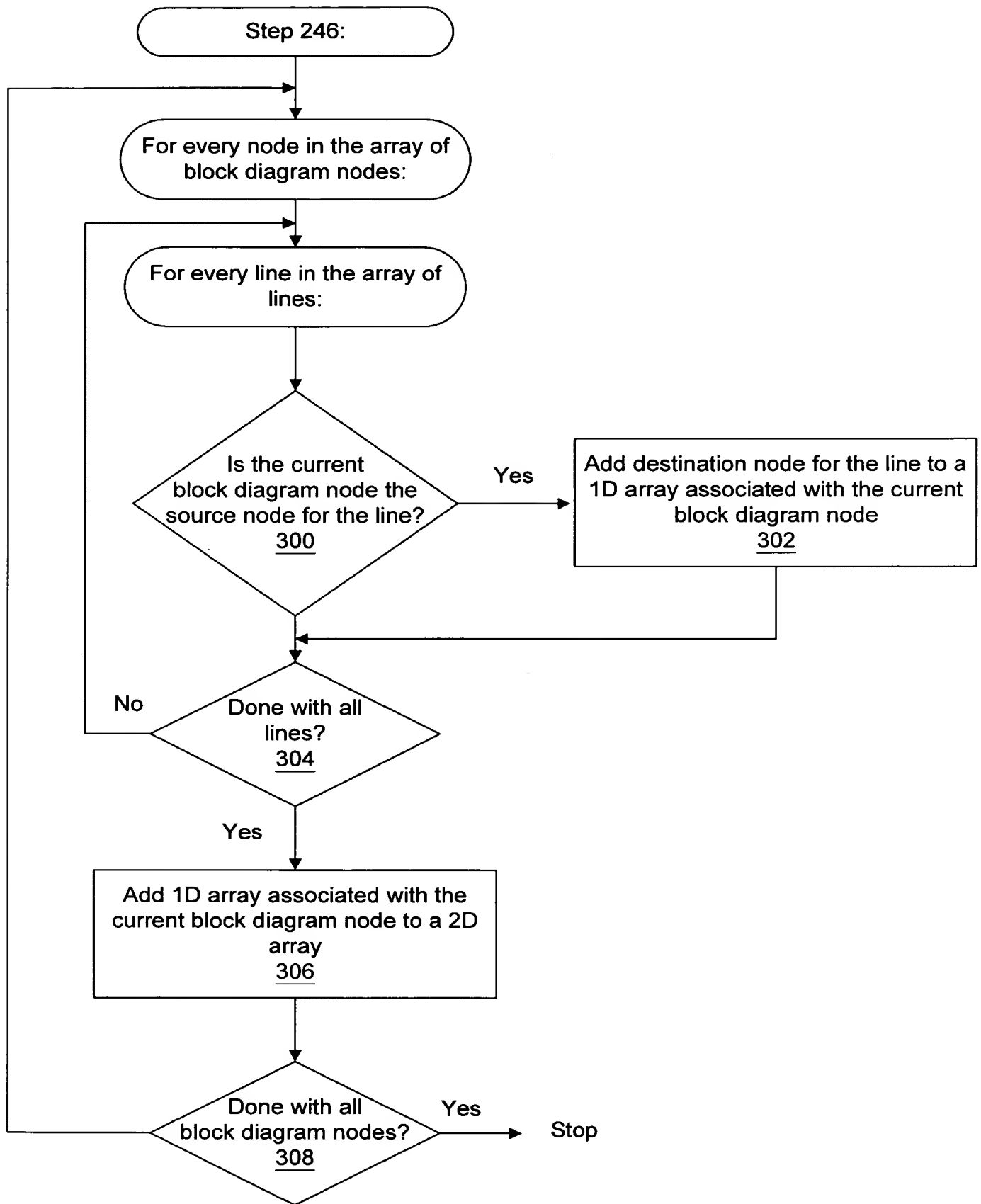


FIG. 6

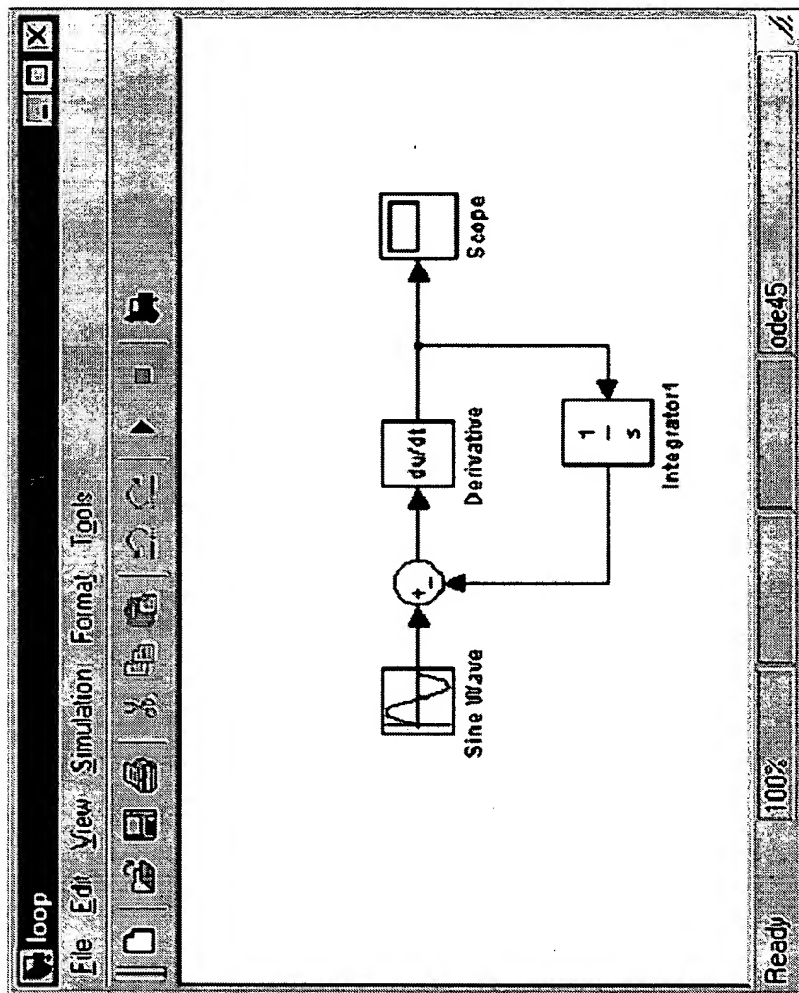


FIG. 7

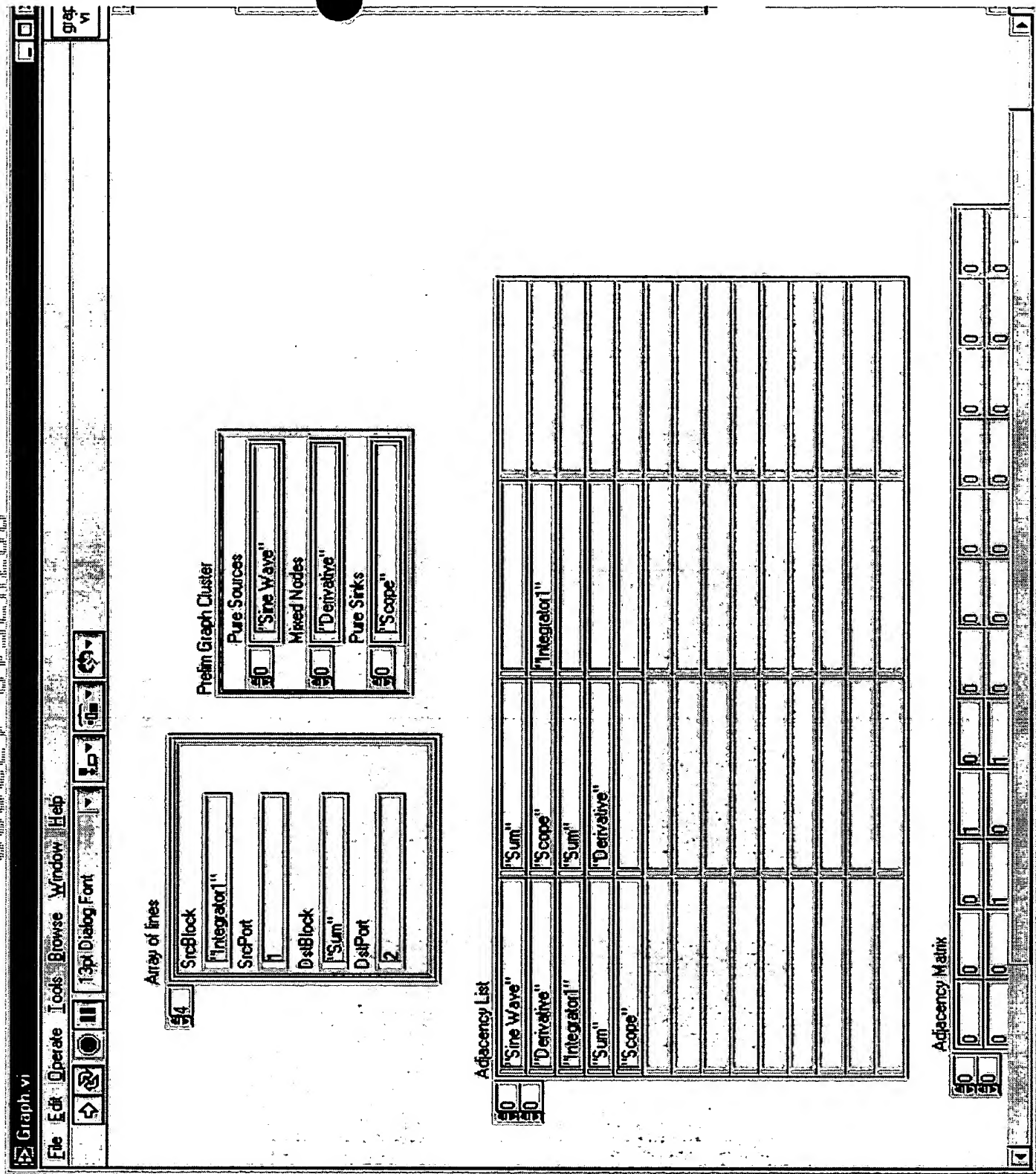


FIG. 8

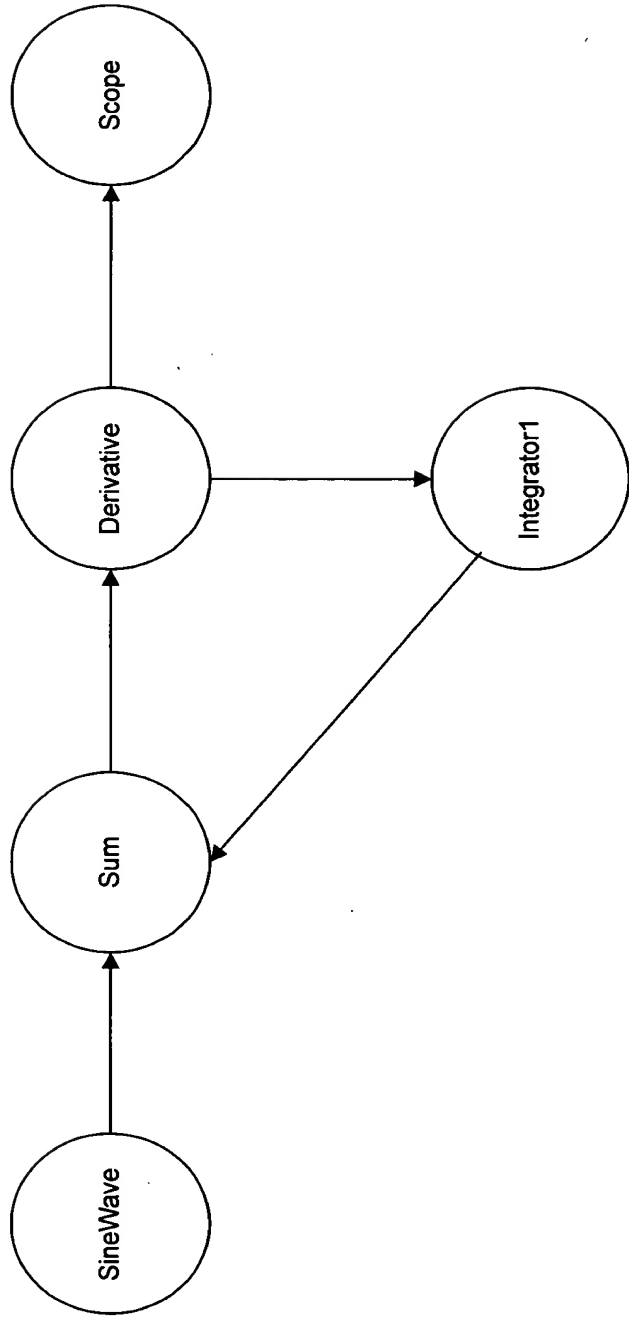


FIG. 9

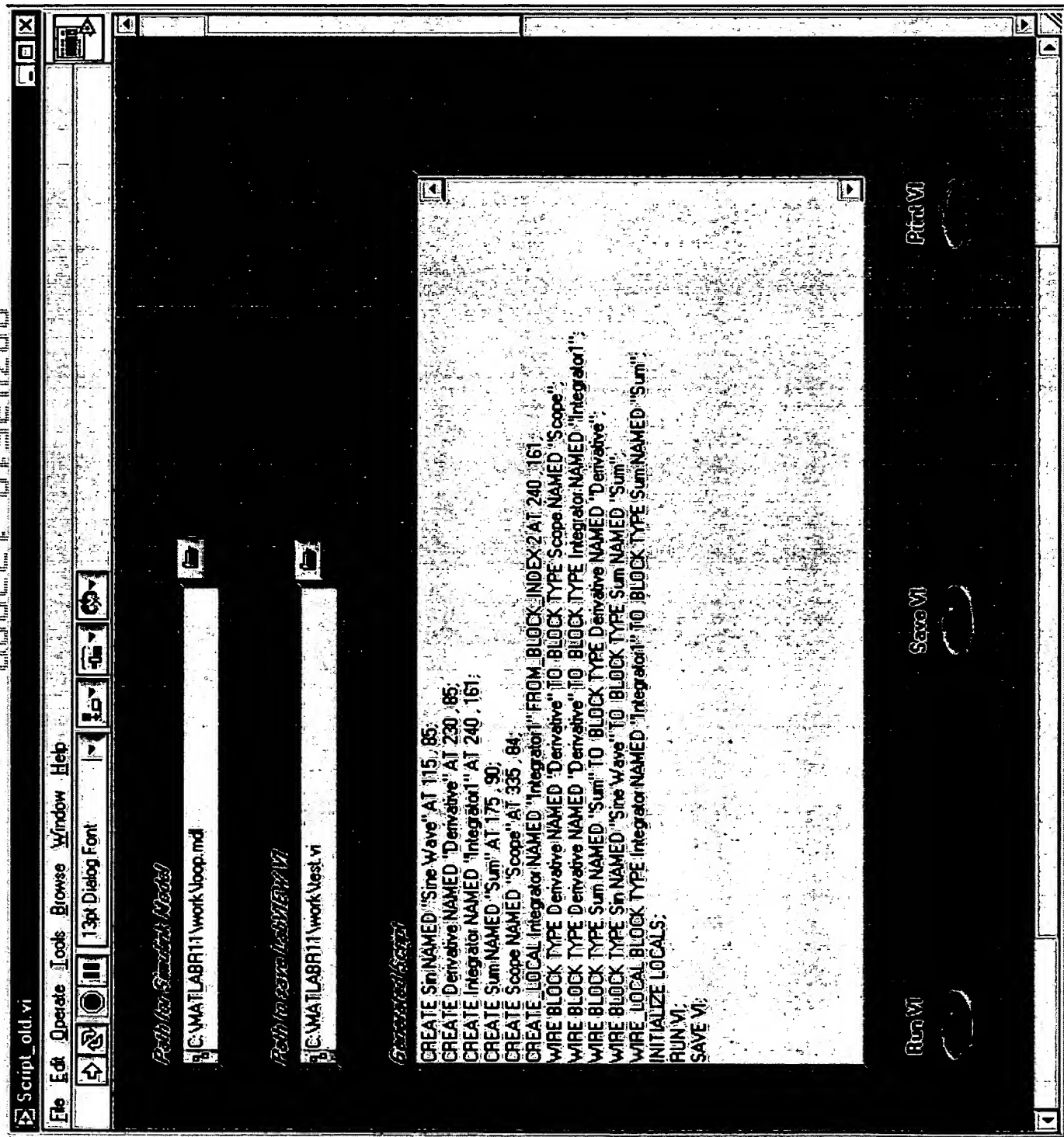


FIG. 10

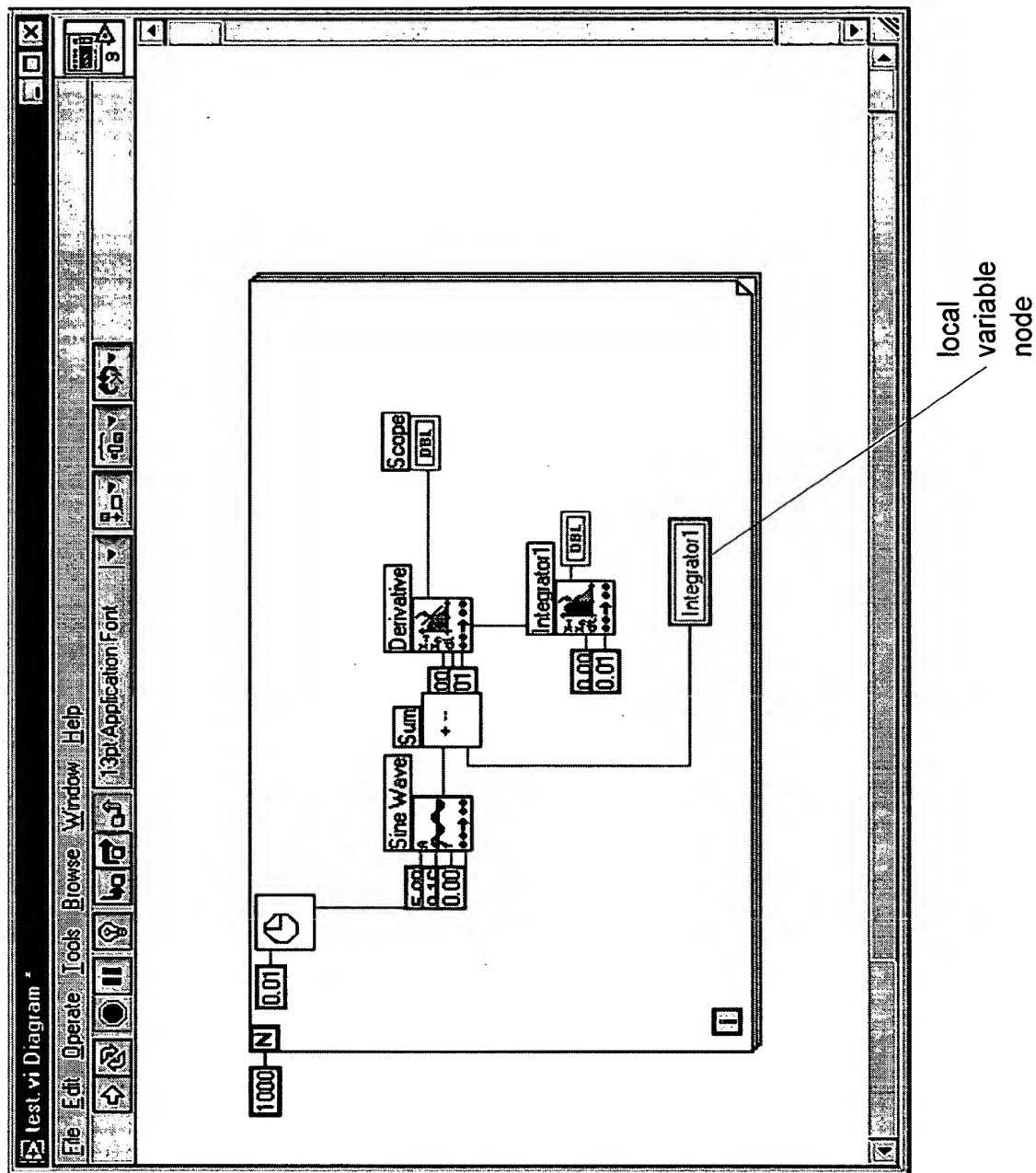


FIG. 12

000227" 0T524260

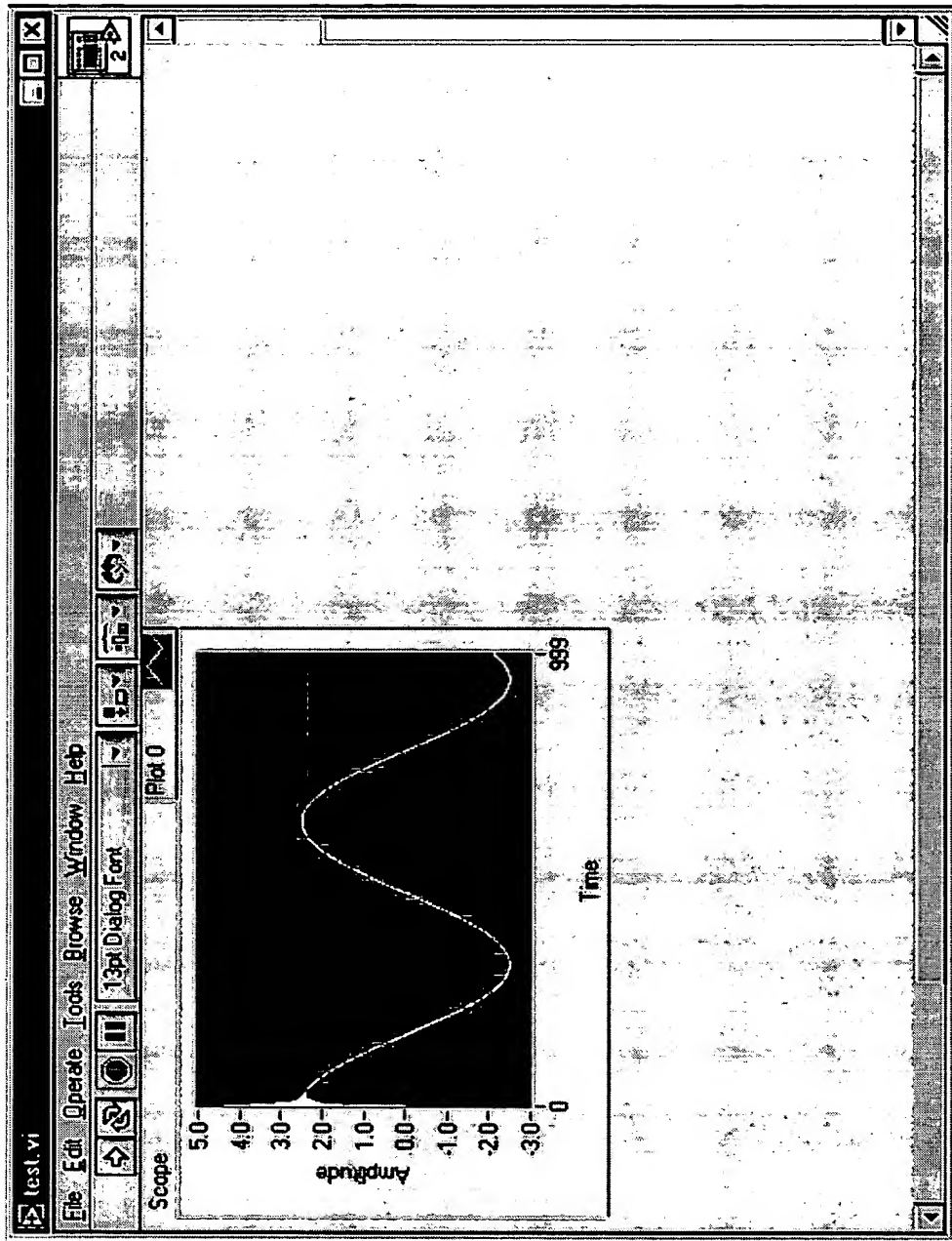


FIG. 13

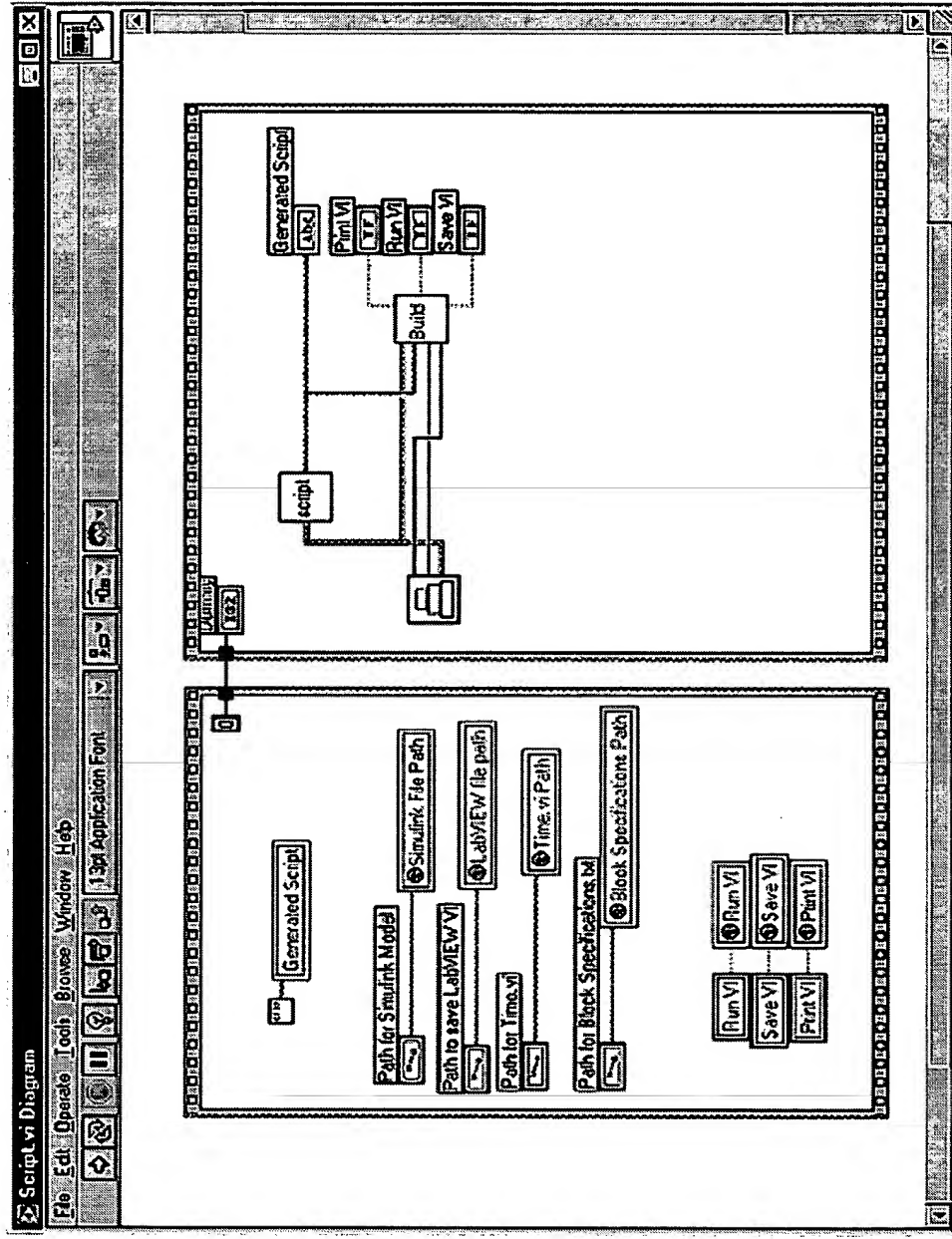


FIG. 14

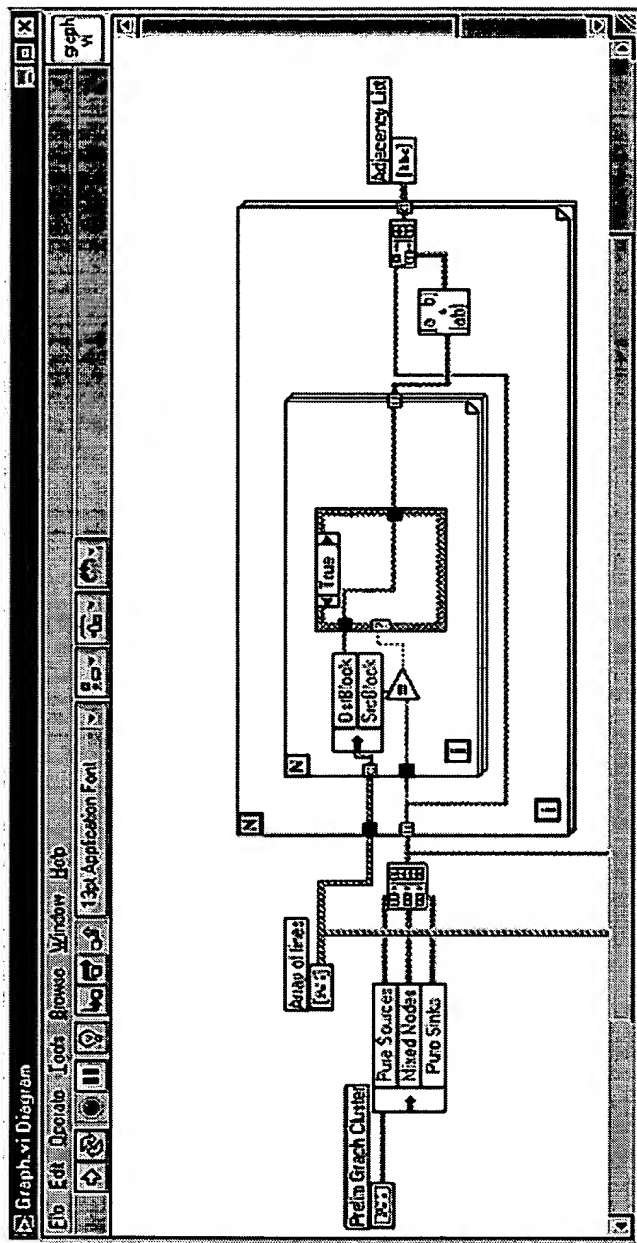


FIG. 15

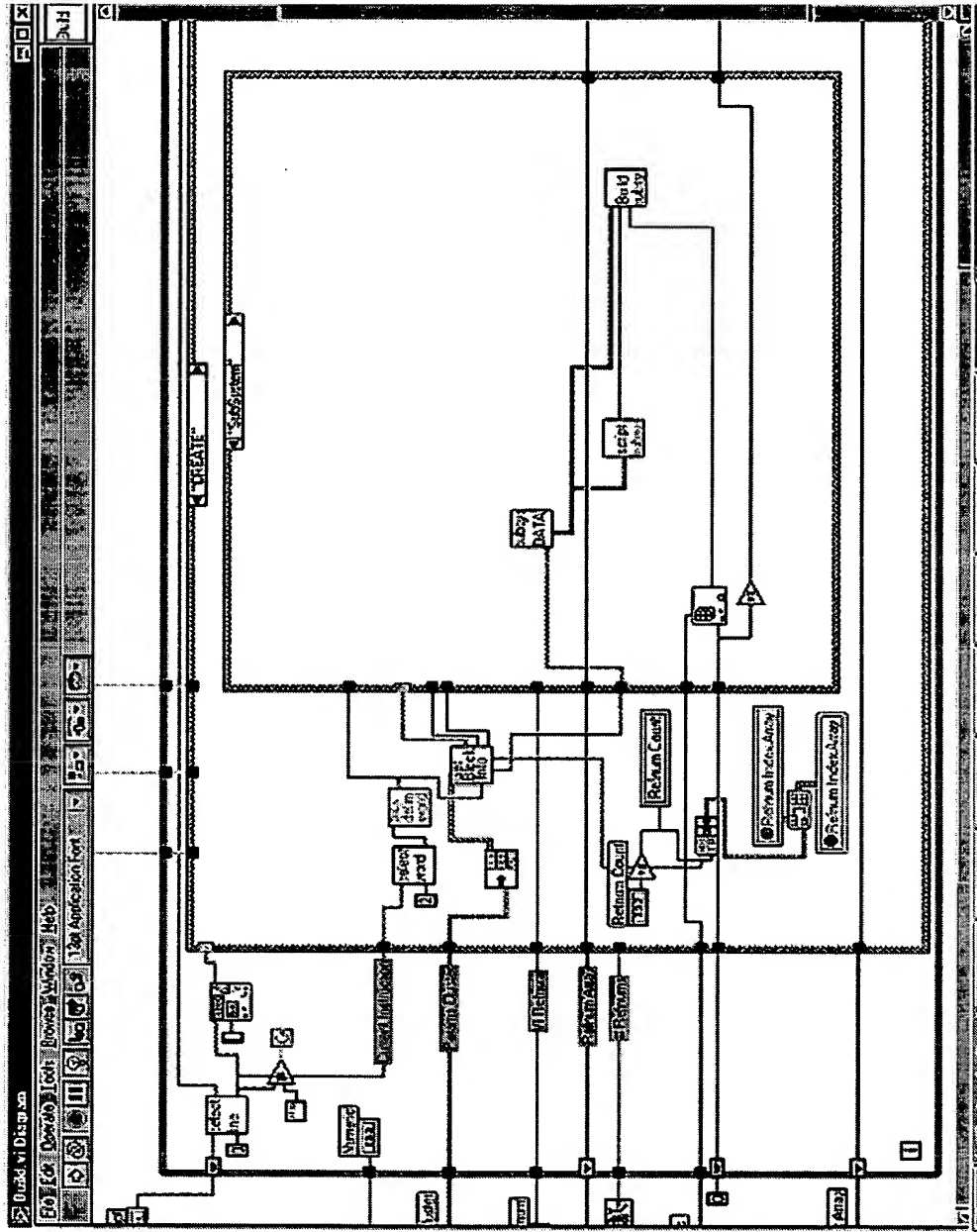


FIG. 16

000227" OF 52460

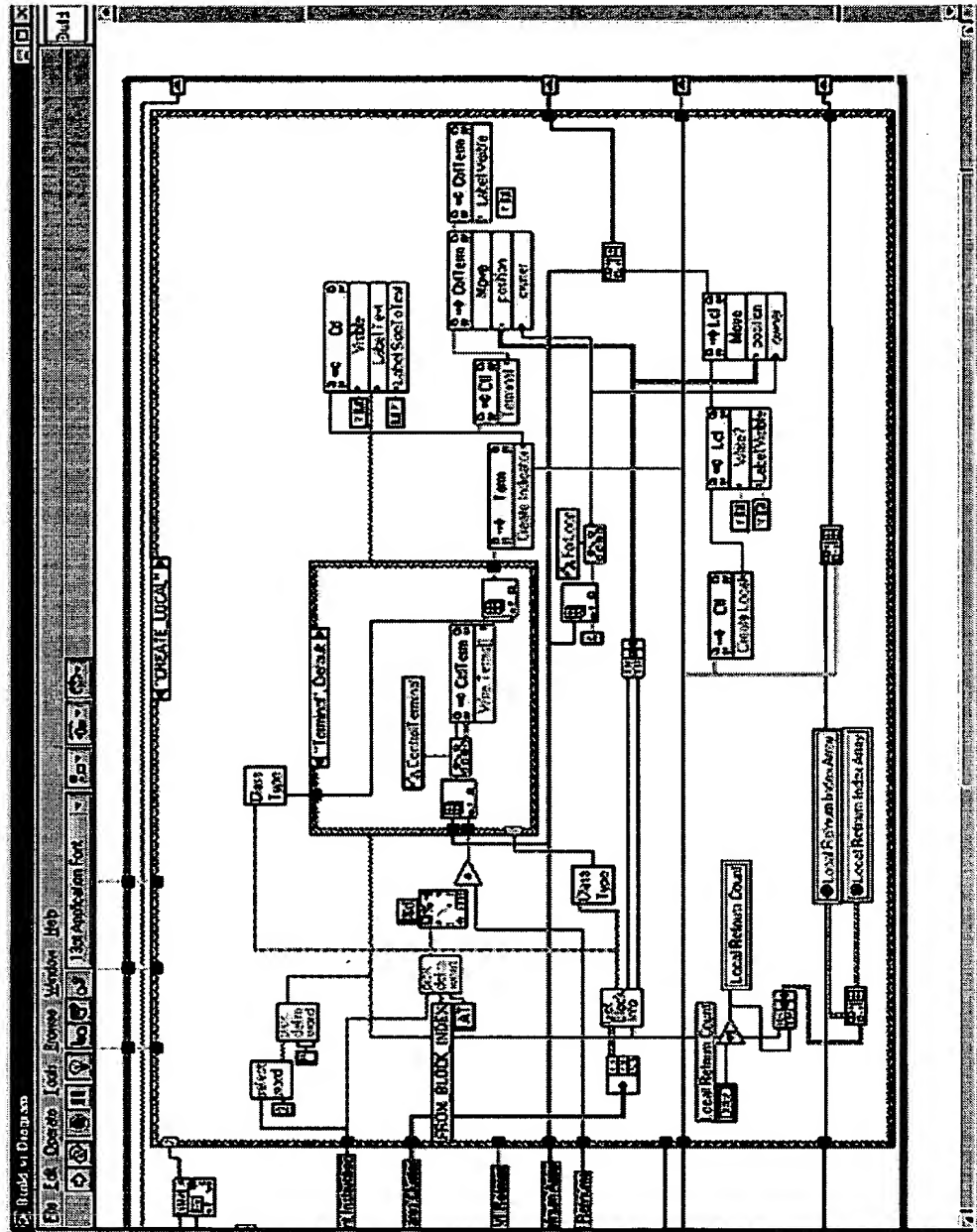


FIG. 17

000227" 07524260

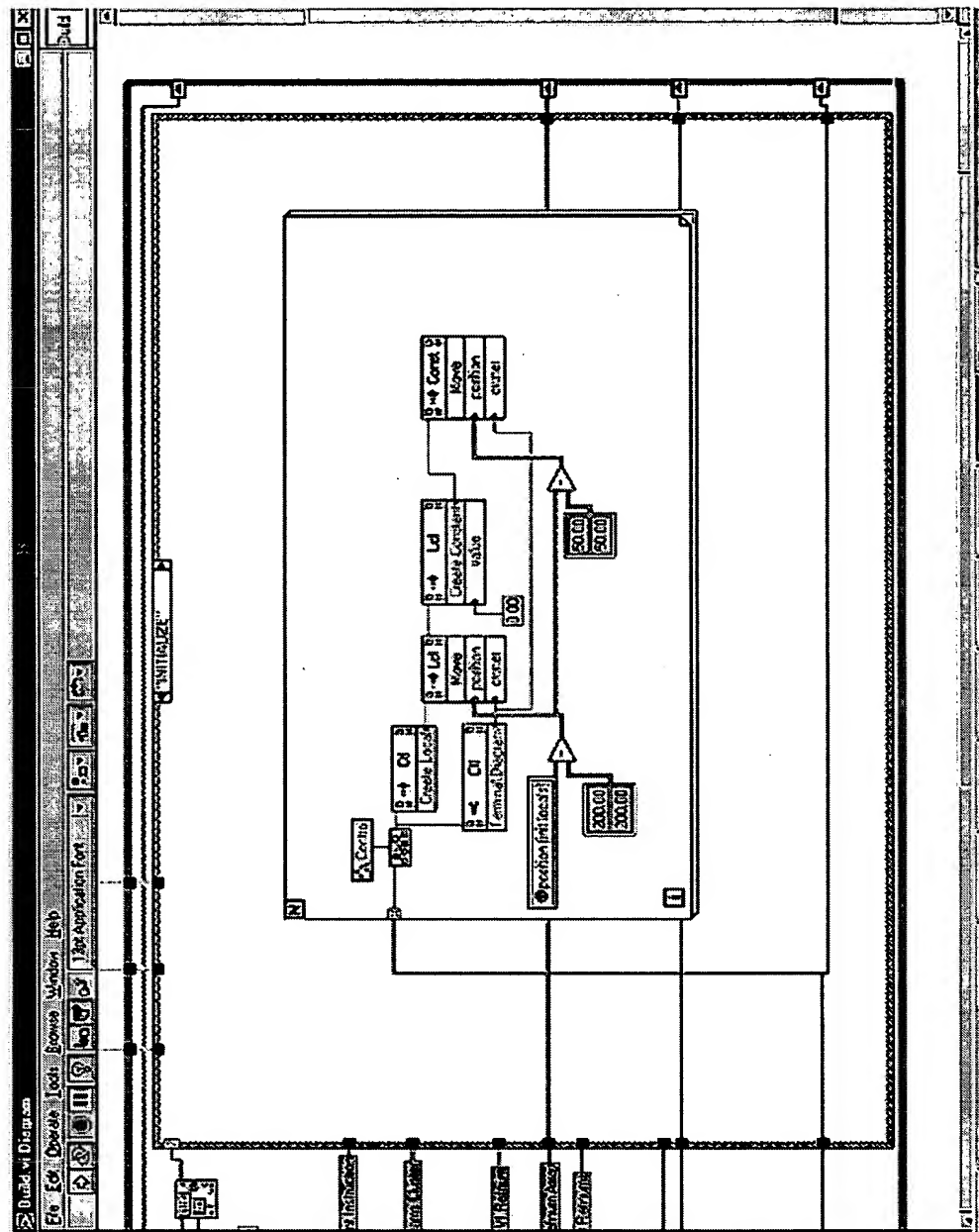


FIG. 18

